

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

COMPLETE LISTING OF THE CLAIMS:

Claims 1-32 : (Canceled)

Claim 33 : (Currently Amended) A method of determining whether there is a break in an optical fiber cable of a telecommunications network between a first point and a second point of the optical fiber cable, comprising the steps of:

connecting to the first point of the optical fiber cable an optical component;
configuring the optical component to be a receive erbium doped fiber amplifier (EDFA);

connecting to the second point of the optical fiber cable an optical time domain reflectometer (OTDR) operative for emitting OTDR signals along the optical fiber cable towards the optical component,

introducing at least one optical signal into the optical fiber cable at the first point thereof after a break in the optical fiber cable is suspected by arranging the receive EDFA to introduce the at least one optical signal into the optical fiber cable and by controlling isolation of an input isolator of the receive EDFA such that, in the absence of an input signal thereto, the at least one optical signal in the form of amplified spontaneous emission noise escapes from an input of the receive EDFA and is introduced into the optical fiber cable;

using the optical fiber cable to carry the at least one optical signal to the second point thereof; and

configuring the OTDR to detect the at least one optical signal from the optical fiber cable and to prevent emission of the OTDR signals at any time during which detection of the at least one optical signal occurs.

Claim 34 : (Previously Presented) The method according to claim 33, and the step of configuring the optical component to be an optical receiver, and in which the introducing step is performed by arranging the optical receiver to introduce the at least one optical signal into the optical fiber cable.

Claim 35 : (Previously Presented) The method according to claim 34, in which the arranging step is performed by configuring the optical receiver with a transmitting device, and the step of transmitting the at least one optical signal from the transmitting device into the optical fiber cable.

Claim 36 : (Canceled)

Claim 37 : (Canceled)

Claim 38 : (Previously Presented) The method according to claim 33, in which the introducing step is performed by superimposing a plurality of optical signals onto the optical fiber cable.

Claim 39 : (Previously Presented) The method according to claim 38, in which the superimposing step is performed by multiplexing the plurality of the optical signals onto the optical fiber cable.

Claim 40 : (Previously Presented) The method according to claim 39, and the step of configuring each optical signal to be a pilot signal having a wavelength different from that of traffic signals transmitted along the optical fiber cable.

Claim 41 : (Previously Presented) The method according to claim 33, in which the introducing step is performed by superimposing a plurality of optical service channel (OSC) optical signals onto the optical fiber cable.

Claim 42 : (Previously Presented) The method according to claim 41, in which the superimposing step is performed by multiplexing the plurality of the OSC optical signals onto the optical fiber cable.

Claim 43 : (Previously Presented) The method according to claim 33, and the step of configuring the OTDR to be a transmitter operated to emit the OTDR signals.

Claim 44 : (Previously Presented) The method according to claim 43, and the step of disabling the OTDR transmitter to prevent emission of the OTDR signals at any time during which detection of the at least one optical signal occurs.

Claim 45 : (Previously Presented) The method according to claim 33, and the step of configuring the OTDR to be a detector operated to detect the at least one optical signal from the optical fiber cable.

Claim 46 : (Previously Presented) The method according to claim 45, and the step of configuring the OTDR detector to be able to detect the at least one optical signal in a wavelength range of approximately 1250 nm to approximately 1700 nm.

Claim 47 : (Previously Presented) The method according to claim 45, and the step of configuring the OTDR detector to be used to receive echoes of the OTDR signals.

Claim 48 : (Previously Presented) The method according to claim 33, and the step of configuring the OTDR to be a receiver used to receive echoes of the OTDR signals.